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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,053	11/21/2001	Frederick A. Azinger	7092 US	4463
30078	7590	01/21/2004		
TEKTRONIX, INC. 14150 S.W. KARL BRAUN DRIVE P.O. BOX 500 (50-LAW) BEAVERTON, OR 97077-0001				
			EXAMINER DHARIA, PRABODH M	
			ART UNIT 2673	PAPER NUMBER

DATE MAILED: 01/21/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,053

Applicant(s)

AZINGER, FREDERICK A.

Examiner

Prabodh M Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 21 November 2001.

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-9 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (6,107,989) in view of Overhage et al. (5,854,996) and Hong et al. (5,448,571).

Regarding Claim 1, Thompson teaches a serial data (Col. 2, Lines 39-41) cursor (Col. 2, Lines 45-55) for an analog waveform display (Col. 3, Lines 37-39) of a serial digital data stream (Col. 2, Lines 39-41) comprising: a cursor representation having a horizontal length equal to a "word-time" (Col. 3, Lines 55-59) for the serial digital data stream (Col. 2, Lines 39-41) derived from a specified protocol (Col. 3, Lines 55-59) and a clock recovered from the serial digital data stream (Col. 3, Lines 17-20); and means for decoding a portion (Col. 3, Lines 59-61) of the analog waveform display (Col. 3, Lines 37-39) delimited by the cursor representation to present a human readable content display (Col. 3, Lines 62-65).

However, Thompson fails to teach specifically display being analog waveform display.

However, Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36).

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Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Overhage et al. in to the teaching of Thompson to have new method for producing logic signal displays for a logic oscilloscope where an analog signal sampled to produce multi-bit digital samples that are representative of the amplitude of the input signal over time.

Thompson teaches a serial data (Col. 2, Lines 39-41) cursor (Col. 2, Lines 45-55) for an analog waveform display (Col. 3, Lines 37-39) of a serial digital data stream (Col. 2, Lines 39-41).

However, Thompson fails to teach specifically analog wave form represented by corresponding serial digital data stream.

However, Hong et al. teaches analog wave form represented by corresponding serial digital data stream (Col. 2, Line 64 to Col. 3, Line 7, Col. 4, Lines 10-35).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Hong et al. in to the teaching of Thompson to avoid input signal degradation due to media noise, thermal noise, amplitude variation, electromagnetic interference, phase misalignments, transients and DC offsets.

Regarding Claim 2, Thompson teaches the cursor representation comprises a highlighted box that encompasses the "word-time" of the display (Col. 3, Lines 55-59).

Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36).

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Regarding Claim 3, Thompson teaches the cursor representation comprises a linear bar that extends along the analog waveform display for the "word-time" (Col. 3, Lines 55-59).

Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36).

Regarding Claim 4, Thompson teaches a serial data cursor for extracting content from a serial digital data stream (Col. 3, Lines 15-21) comprising: means for displaying an analog waveform of the serial digital data stream (Col. 3, Lines 23-39); means for displaying a representation of the serial data cursor along with the analog waveform, the representation having a horizontal length equal to a "word-time" for the serial digital data stream derived from a specified protocol (Col. 3, Lines 55-59) and a clock recovered from the serial digital data stream (Col. 3, Lines 17-20); and means for decoding a portion of the analog waveform (Col. 3, Lines 59-61) delimited by the representation to provide a display of the content in human readable form (Col. 3, Lines 62-65).

However, Thompson fails to teach specifically display being analog waveform display.

However, Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Overhage et al. in to the teaching of Thompson to have new method for producing logic signal displays for a logic oscilloscope where an analog signal sampled to produce multi-bit digital samples that are representative of the amplitude of the input signal over time.

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Thompson teaches a serial data (Col. 2, Lines 39-41) cursor (Col. 2, Lines 45-55) for an analog waveform display (Col. 3, Lines 37-39) of a serial digital data stream (Col. 2, Lines 39-41).

However, Thompson fails to teach specifically analog wave form represented by corresponding serial digital data stream.

However, Hong et al. teaches analog wave form represented by corresponding serial digital data stream (Col. 2, Line 64 to Col. 3, Line 7, Col. 4, Lines 10-35).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Hong et al. in to the teaching of Thompson to avoid input signal degradation due to media noise, thermal noise, amplitude variation, electromagnetic interference, phase misalignments, transients and DC offsets.

Regarding Claim 5, Thompson teaches the cursor representation comprises a highlighted box that encompasses the "word-time" of the display (Col. 3, Lines 55-59).

Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36).

Regarding Claim 6, Thompson teaches the cursor representation comprises a linear bar that extends along the analog waveform display for the "word-time" (Col. 3, Lines 55-59).

Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36).

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Regarding Claim 7, Thompson teaches a serial data cursor for extracting content from a serial digital data stream (Col. 3, Lines 15-21) comprising: means for displaying an analog waveform of the serial digital data stream (Col. 3, Lines 23-39); the steps of: loading a data protocol having parameters for the serial digital data stream; determining a "word-time" from the parameters (Col. 2, Lines 40-49, Col. 3, Lines 55-59) and a clock recovered from the serial digital data stream; displaying the analog waveform together with a representation of the serial data cursor having a length equal to the "word-time" (Col. 2, Lines 40-55, Col. 3, Lines 17-20); and means for decoding a portion of the analog waveform (Col. 3, Lines 59-61) delimited by the representation to provide a display of the content in human readable form (Col. 3, Lines 62-65).

However, Thompson fails to teach specifically display being analog waveform display.

However, Overhage et al. teaches specifically display being analog waveform display (Col. 12, Lines 29-36) and the steps of: loading a data protocol having parameters for the serial digital data stream; determining a "word-time" from the parameters and a clock recovered from the serial digital data stream; displaying the analog waveform together with a representation of the serial data cursor having a length equal to the "word-time" (Col. 5, Lines 25-45).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Overhage et al. in to the teaching of Thompson to have new method for producing logic signal displays for a logic oscilloscope where an analog signal sampled to produce multi-bit digital samples that are representative of the amplitude of the input signal over time.

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Thompson teaches a serial data (Col. 2, Lines 39-41) cursor (Col. 2, Lines 45-55) for an analog waveform display (Col. 3, Lines 37-39) of a serial digital data stream (Col. 2, Lines 39-41).

However, Thompson fails to teach specifically analog wave form represented by corresponding serial digital data stream.

However, Hong et al. teaches analog wave form represented by corresponding serial digital data stream (Col. 2, Line 64 to Col. 3, Line 7, Col. 4, Lines 10-35).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Hong et al. in to the teaching of Thompson to avoid input signal degradation due to media noise, thermal noise, amplitude variation, electromagnetic interference, phase misalignments, transients and DC offsets.

Regarding Claim 8, Overhage et al. teaches the steps of: generating a trigger according to a specified characteristic of the serial digital data stream from the parameters; and capturing the analog waveform according to the trigger (active means the edge that the logic devices change state in response to characteristic of the serial digital data stream from the parameters Col. 5, Lines 25-45, Col. 9, Line 44 to Col. 10, Line 14).

Regarding Claim 9, Thompson teaches the steps of: comparing the portion with a specified parameter from among the parameters; and incrementing the serial data cursor by "bit-time" increments until the portion equals the specified parameter (Col. 2, Lines 40-55, Col. 3, lines 15-29, Col. 3, Lines 35-41, Col. 3, Lines 50-65).

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Overhage et al. teaches the steps of: comparing the portion with a specified parameter from among the parameters; and incrementing the serial data cursor by "bit-time" increments until the portion equals the specified parameter (Col. 5, Lines 25-45, Col. 9, Line 44 to Col. 10, Line 14).

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references render the claims obvious.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shoji et al. (5,196,837) Cursor generating apparatus.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231. The examiner can normally be reached on M-F 8AM to 5PM.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-3054938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9341.

7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

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Any response to this action should be mailed to:

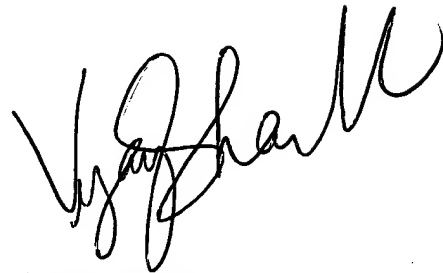
Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

AU2673

December 11, 2003

A handwritten signature in black ink, appearing to read 'Vijay Shankar', written in a cursive style.

**VIJAY SHANKAR
PRIMARY EXAMINER**